

Fractionation of a crude C₄ fraction

Abstract

A process for fractionating a crude C₄ fraction comprising butanes, butenes, 1,3-butadiene and small amounts of other hydrocarbons including C₄-acetylenes, by extractive distillation using a selective solvent, wherein the crude C₄ fraction (1) is fed into the middle region of a first extractive distillation column (K I) and the selective solvent (2) is fed into the column at a point above that at which the crude C₄ fraction (1) is introduced and a gaseous side stream (3) which comprises the C₄-acetylenes together with predominantly the selective solvent and in which the concentration of the C₄-acetylenes is below the spontaneous decomposition limit is taken off from the first extractive distillation column (K I) at a point below the feed point for the crude C₄ fraction (1) and an overhead stream (5) comprising the components which are less soluble than the C₄-acetylenes in the selective solvent is taken off from the top of the first extractive distillation column, is proposed.

(Figure)